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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,349	12/12/2005	Petri Lammi	P08810US00/DEJ	6401
881 7590 07/26/2007 STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			EXAMINER NGUYEN, PHU HOANG	
			ART UNIT 1731	PAPER NUMBER
			MAIL DATE 07/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/560,349	Applicant(s) LAMMI, PETRI	
	Examiner Phu H. Nguyen	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)            |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application. |
| Paper No(s)/Mail Date <u>4/12/2006</u> .   | 6) <input type="checkbox"/> Other: _____                           |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "to free radiation contact" in the second and third line of the instant claim 9. There is insufficient antecedent basis for this limitation in the claim. For purpose of examination, the examiner will interpret the limitation to mean "to reduce heat radiation contact".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Vitkala et al. (U.S. Patent No. 6427488).

Vitkala discloses a method for regulating the heating effect of resistances (6, fig. 1) (corresponding to the claimed "heating elements" recites in the instant claim 1) in a furnace (1, fig. 1) and hot-air fans (5, fig. 1) blasting down on the glass, which furnace comprises a glass heating sector (1,2 of fig. 1), a transportation rail (7, fig. 1) to

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transport glass sheet to and from the said heating section and said heating elements to heat the glass by means of radiation and air blast, and a furnace control system (13, fig. 1). A temperature sensor (12, fig. 1) (corresponding to the claimed "measuring instruments" recites in the instant claim 1) measures the air temperatures in the heating section above glass transportation rail. The control system regulates the power received by the heating elements, such that the air temperature in the furnace remains substantially constant at a certain set value (column 2, line 19-33).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vitkala et al. (U.S. Patent No. 6427488).

Regarding claim 5, although Vitkala does not expressly disclose the sensors are located about 10-50 mm above glass/rail. It would have been obvious to one of ordinary skill in the art at the time the invention was made through routine experiments to determine the optimal location for sensors that deliver the best signal to the controller. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 9, it would have been obvious to one of ordinary skill in the art to reduce radiation contact between a heat source and another object by placing another object (a sensor in this case) in between. Accordingly, claim 9 is rejected.

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Claims 2-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vitkala et al. (U.S Patent No. 6427488) as applied to claim 1 above, and further in view of Maguire et al. (U.S Patent No. 5957961).

Regarding claims 2-4 and 6, Vitkala does not expressly disclose the use of multiple sensors arranged in a pattern where the temperature average of them is calculated to control the heating of glass. Maguire discloses a method of controlling temperature where temperature processing circuit takes the signals from the temperature sensors and either use the average temperature or the highest temperature (column 13, line 20-26) (the processing circuit inherently calculate the average temperature as it receives signals from the sensors); also Maguire discloses a number of sensors arranged in a desired location where each sensor providing an output indicative of temperature (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use multiple sensors arranged at desired locations for a more complete heating profile of the observed space and use the average temperatures of the sensors to control heating power needed.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu H. Nguyen whose telephone number is 571-272-5931. The examiner can normally be reached on M-F:

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 7/20/2007

  
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